

## **DETAILED ACTION**

### ***Allowable Subject Matter***

Claims 1-2,6,8,16,17,19,20,21,26-28 and 33-36 are allowed. Since claims 1 and 27 are allowed and generic to the withdrawn claims 22,25 and 29, claims 22,25 and 29 are now rejoined. Therefore, claims 1-2,6,8,16,17,19,20,21-22,25,26-29 and 33-36 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art of record either taken singularly or in combination fails to disclose the invention as claimed. In particular, references to Cao's 941, Koji's 773, Farkos' 770 and Delong's 673 are the closest prior art but fails to disclose that the moving piece includes temporary magnets, arranged at both end portions in the sliding direction, and a permanent magnet is arranged between the temporary magnet arranged at both end portions and a spiral groove turning on the side of the moving piece in the sliding direction (claim 1) and an elastic sealing member, the passage connecting member is fixed to the moving piece and the exciting coil is fixed by the passage connecting member so that a gap can be formed between the exciting coil and the side of the moving piece accommodating body (claim 27) in combination with other limitations in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho v. Duong whose telephone number is 571-272-4793. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tyler J. Cheryl can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tho v Duong/  
Primary Examiner, Art Unit 3744